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10/810,493	03/26/2004	Michael D. McKinley	2003.09.009.NS0	8138

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EXAMINER	
NGUYEN, KHAI N	
ART UNIT	PAPER NUMBER
2609	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/810,493	MCKINLEY ET AL.	
	Examiner	Art Unit	
	Khai N. Nguyen	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 8-13, 15-18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hebert et al. (U.S. Patent No. 6,088,749).

Regarding claims 1 and 8, Hebert et al. teach a switch and a telecommunication network with at least one of the switches comprising:

a plurality of call control agent functions, at least two of the call control agent functions associated with different signaling protocols (column 2, lines 5-8), the signaling protocols defining a plurality of signaling control primitives (Fig. 7D to Fig. 9); and

a call control function operable to control routing of telephone calls through the switch, wherein the call control function is accessed using an application programming interface (API), the API comprising a plurality of classes defining objects representing the signaling control primitives (Fig. 7A-8G, column 13, lines 25-45).

Regarding claims 2 and 9, Hebert et al. teach a switch and a network, wherein: the plurality of classes comprises a base class and at least one derived class derived from the base class (Fig. 5 – 506-MSG TYPE, column 10, lines 4-13).

Regarding claims 3 and 10, Hebert et al. teach a switch and a network, wherein: the base class comprises the only base class in the API; and a plurality of derived classes are derived from the base class (Fig. 4, column 9, lines 49-53).

Regarding claims 4 and 11, Hebert et al. teach a switch and a network, wherein: the call control function comprises a first call control function; the switch further comprises a second call control function; and each call control function is accessed by the other call control function using the API (Fig. 4, Fig. 7A-8G, column 18, lines 34-40).

Regarding claims 5 and 12, Hebert et al. teach a switch and a network, wherein: the switch and the network comprises a plurality of sides, each side comprising a plurality of call control agent functions and a call control function (column 1, lines 31-40, and column 3, lines 35-39).

Regarding claims 6 and 13, Hebert et al. teach a switch and a network, wherein: the at least one switch further comprises a service switching function, wherein the service switching function is operable to facilitate communication with a service control point; and the switch further comprising a service switching function, wherein the service switching function is operable to facilitate communication with a service control point (column 3, lines 5-9, lines 24-34);

Regarding claim 15, Hebert et al. teach a network, wherein the at least one switch comprises one of a service switching point and a central office switch (Fig. 1 to Fig. 3B).

Regarding claim 16, Hebert et al. teach a method comprising:

identifying a plurality of signaling control primitives associated with a signaling protocol (Fig. 4 – 442a-442c, 444a-44c, column 8, lines 1-3);

identifying one or more first classes associated with an application programming interface (API) to a call control function in a switch (column 9, lines 54-58);

extending one or more second classes associated with the API, the one or more first classes and the one or more second classes defining objects representing the signaling control primitives (Fig. 9 – Fig. 11, column 21, lines 9-29); and

allowing access to the call control function using the signaling protocol (column 9, lines 49-53).

Regarding claim 17, Hebert et al. teach a method wherein the first and second classes facilitate access to the call control function by a plurality of call control agent functions, at least two of the call control agent functions associated with different signaling protocols (Fig. 4, column 8, lines 30-38).

Regarding claim 18, Hebert et al. teach a method wherein: the base class comprises a single base class and a plurality of derived classes derived from the base class (Fig. 4, column 9, lines 49-53).

Regarding claim 20, Hebert et al. teach a method wherein: the signaling protocol comprises a first signaling protocol; the one or more first classes are associated with both the first signaling protocol and a different second signaling protocol (Fig. 4 – 442a-442c, 444a-44c, column 8, lines 1-60)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 7,14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbert et al. as applied to claims 1 and 8 above, and further in view of Lucent Technologies EXS Converged Services Platform (EDP Weekly's IT Monitor, March 19, 2001, and EXS Converged Services Platform Product Overview datasheet, Lucent Technologies March 13, 2001).

Claim 7 - The switch of Claim I, wherein the signaling protocols comprise a Plain Old Telephony System (POTS) signaling protocol, a Session Initiation Protocol (SIP) signaling protocol, and an Integrated Services Digital Network User Part (ISUP) signaling protocol.

Claim 14. The network of Claim 8, wherein the signaling protocols comprise a Plain Old Telephony System (POTS) signaling protocol, a Session Initiation Protocol (SIP) signaling protocol, and an Integrated Services Digital Network User Part (ISUP) signaling protocol.

Claim 19. The method of Claim 16, wherein the signaling protocol comprises one of a Plain Old Telephony System (POTS) signaling protocol, a Session Initiation Protocol (SIP) signaling protocol, and an Integrated Services Digital Network User Part (ISUP) signaling protocol

Regarding claims 7, 14 and 19, Hebert et al. disclose everything claimed as applied above (see claim 1, 8 and 16). However, Hebert et al. fail to include the Session Initiation Protocol (SIP) signaling protocol as one of the protocols that the universal API can support. Although Hebert et al. teach their signaling protocols comprise a Plain Old Telephony System (POTS) signaling protocol, and an Integrated Services Digital Network User Part (ISUP) signaling protocol (Herbert et al., Fig. 2 – Network/Data Link, and Fig. 3A Network Protocol Layer (Layer3)).

In the same field of endeavor, Lucent Technologies Inc. the EXS Converged Services Platform support the IP protocols (SIP, H.323, RTP, and MGCP), plus a wide variety of call control and signaling support in PSTN, packet, or converged network environments (see Lucent Technologies Inc. – EXS Converged Services Platform product overview). The advantage of Lucent Technologies Inc.' s EXS Converged Services Platform is the open programmability, and Universal Signaling API that makes underlying network interfaces and protocols totally transparent to the application.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Herbert et al. with the SIP signaling protocol, and other IP protocols for their universal API to support both PSTN and IP networks.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mishra et al. (U.S. Patent 6,594,685) teach a universal application programming interface (API) utilizing a generic message format for performing call control processing and network signaling protocol requirements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai N. Nguyen whose telephone number is (571) 270-3141. The examiner can normally be reached on Monday - Thursday 6:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on (571) 272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander Eisen
SPE
Art Unit 2609

KNN
6/12/2007